

Northern Plains Climate Hub

U.S. DEPARTMENT OF AGRICULTURE

www.climatehubs.usda.gov/ hubs/northern-plains



Dannele Peck Director Ag Economics



Windy Kelley Coordinator Extension



Julie Elliott NRCS Liaison Rangeland Planning



Katie Walsh Postdoc Social Science



Matt Reeves Co-Lead, FS Rangeland Modeling



Johanna Pate Co-Lead, NRCS Grazing Lands Team



Res. Lead, ARS Rangeland Science

Select Accomplishments in FY22 Q1-Q3 (Oct 2021 – June 2022)

Engaging Stakeholders in Tool Development & Outreach

Ranchers in the western U.S. are experiencing many social and ecological changes, and are striving to adapt. Researchers are eager to help, but don't always get to hear directly from ranchers about their challenges, needs, and ideas. So, USDA and university partners held focus groups with 63 livestock



What does resilience mean to western ranchers?

We set out to identify the pressures ranchers are facing in the 21st Century. This story map presents the themes that resulted from qualitative analysis of interviews and focus groups with livestock producers across the Western U.S.















Screenshot of the Ranching Resilience Story Map

They described changes in ecological and economic conditions, rangeland uses and users, and ranching communities themselves. To help the public learn more about participating ranchers' perspectives and adaptation efforts, our Hub postdoc (Dr. Katie Walsh) and ARS colleague (Nicole Kaplan) developed an interactive Story Map, which has been

producers and rangeland managers from 7 communities.

viewed ~650 times in its first three months. Explore the Story Map yourself at https://go.usa.gov/xzvq5.

Soil health practices, such as no-till, cover crops, and diverse rotations, can reduce the vulnerability of agricultural systems to climate change. But these practices may need to be adapted for individual farms, so **peer-to-peer learning** events are a popular way for producers to share their soil health experiences. The Northern Plains Climate Hub liaison from NRCS (Julie Elliott) helped plan and host a 2-day soil health event, "Farming Evolution," in eastern Colorado this past February. Event partners included conservation districts, natural resource districts, and state conservation associations and boards. This popular annual event attracted 120 in-person attendees, 105 online views, and 283 social media interactions.





Partnering to Share Science & Information

Climate change is disrupting food systems, leading consumers and producers to ask, "How can agriculture successfully adapt to and help mitigate climate change?" In response, the Northern Plains Climate Hub director (Dr. Dannele Peck) presented at two high-profile events in May 2022, reaching 190 national and international participants. First, as part of a virtual briefing hosted by the National Sustainable Agriculture Coalition and partners, the Hub highlighted the importance of research co-production with stakeholders, involving them throughout the research process, from conceptualization to application. The Hub shared an example of co-production within the USDA ARS Long-Term Agroecological Research (LTAR) network—the Collaborative Adaptive

Rangeland Management (CARM) project.

At a virtual workshop hosted by the Agricultural Model Intercomparison and Improvement Project (AgMIP) on "Making Climate-Smart Agriculture Work," the Hub showcased its essential partnerships with ARS, LTAR, USDA Natural Resources Conservation Service, university researchers and Extension in the production of Grass-Cast (https://grasscast.unl.edu).



Screenshot of the Climate Hub's opening slide during the AgMIP workshop

Project Update: WY Conditions monthly webinar series is open to the public!

The Northern Plains Climate Hub coordinator (Windy Kelley) continues to lead the **Wyoming Conditions Monitoring Team**, which hosted 8 **monthly webinars** so far in FY22, reaching 260 participants in real time, plus 600 views of online recordings. These webinars are **now open to the general public!** To receive future webinar announcements, email Windy Kelley at wkelley1@uwyo.edu. You can view recent webinars at **drought.wyo.gov**.



FY22 (Q1 – Q3) at a Glance



Reached **3,300** people by:



Delivering **30** presentations



Hosting **19** webinars or virtual workshops